REMARKS

Status of Claims

Claim 1 has been amended to incorporate the features of claim 11 and claim 11 has been canceled. Claim 12 has been amended to depend from claim 1. Also, claims 1, 4, 5, and 7-10 have been amended to replace "storage means" with "RAM." The term "RAM" is used consistently throughout the specification beginning at paragraph [0071]. Applicant submits that replacing the term "storage means" with "RAM" does not introduce any new issues outside of the scope of the Examiner's original search or consideration and does not introduce any new matter. Entry of the proposed amendments after Final Rejection is thus appropriate and is respectfully solicited. Upon entry of the above amendments, claims 1, 3-10 and 12 will remain in the application.

Claim Rejections – 35 U.S.C. §103

Claims 1, 3-5, 7-9, and 11-12 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable as obvious over Kondo et al. (US 5,724,322) in view of Yamagami et al. (US 5,949,746) and Katoh et al. (US 7,068,581). Also, claims 6 and 10 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable as obvious over Kondo et al. in view of Yamagami et al. and Katoh et al. further in view of Yasuda et al. (US 6,501,901). These rejections are respectfully traversed and withdrawal of the rejections is solicited.

Claim 1 relates to an apparatus for playback of a data storage compact disk of the type having a series of data streams and a table of contents (TOC) prerecorded in preassigned tracks thereon where the TOC on the disk lists the starting addresses of the data streams but does not list the ending addresses of the data streams. The claimed playback apparatus is characterized by:

> data processing means connected to said RAM and said transducer for creating an expanded TOC by adding an ending address of each data stream to the original TOC which has been stored on said RAM and for controlling the scanning motion of the transducer with respect to the disk according to the expanded TOC, the expanded TOC being editable for causing said data processing means to play either whole or some desired part of any desired one of the data streams, wherein said data processing means comprises input means for inputting instructions for editing the TOC that has been stored on said RAM, ending address addition means for adding to the original TOC that has been stored on said RAM, as the ending address of each data stream, the starting address of the next data stream, editing means for editing the

> expanded TOC on said RAM in response to the instructions that have been input on said input means, and control means for causing the disk to be played according to the edited TOC on said RAM.

Such a playback apparatus is not shown or suggested by Kondo et al., Yamagami et al., Katoh et al., or Yasuda et al., taken alone or collectively.

As noted in the previous response, the TOC on the data storage compact disk does not contain the ending addresses of the data streams. Instead, the "ending address addition means" adds to the original TOC stored on the storage means, as the ending address of each data stream, the starting address of the next data stream. Such is not the case with the cited references.

Kondo et al. discloses an apparatus for recording and/or reproducing a recording medium in which management information is recorded together with the data. The management information is stored in a table of contents (U-TOC). As illustrated in Figure 10 and described at column 13, lines 2-12, of Kondo et al., each U-TOC sector includes both the start address and the end address of each stored tune. As noted in paragraph [0005] of the present specification, the presence of the ending addresses of the tunes makes editing of the TOC not possible in the case of prior art CDs. The TOC of the claimed data storage disk addresses this limitation in the art by providing playback apparatus that allows the ending addresses of the data streams to be removed from the TOC, thereby facilitating editing of the TOC.

Yamagami et al. is cited for their purported disclosure of means for providing each data stream with an address region for storing an address of the frame and a data region.

Applicant provided comments in the previous response for distinguishing the Examiner's proposed combination of the teachings of Kondo et al. and Yamagami et al. In the Final Rejection, the Examiner acknowledges at page 3, lines 1-2, and at page 8, lines 1-5, that Kondo et al. and Yamagami et al. fail to teach that the ending addresses of the data streams are not listed in the TOC. However, for such a teaching, the Examiner now cites Katoh et al. as purportedly teaching an optical recording medium where the ending addresses are not listed. Applicant respectfully disagrees. Katoh et al. teach that addresses on an optical recording medium are consecutively assigned and the physical arrangement of the sectors and addresses is such that as the number of sectors increases (or decreases) the

address increases consecutively. Katoh et al. say nothing of the ending addresses, so there is no teaching one way or the other to indicate whether ending addresses are used. The Examiner improperly suggests that Katoh et al.'s silence on the storage of ending addresses is a teaching that such ending addresses are not stored. Applicant submits that Katoh et al.'s silence on this issue does not equate to a teaching of removing the ending addresses from the TOC.

Applicant submits that the teachings of Kondo et al., Yamagami et al. and Katoh et al., taken together, do not teach at least the following features of claim 1:

(1) The data processing means creates an expanded TOC by adding an ending address of each data stream to the original TOC of the data storage compact disk (CD);

(2) Ending address addition means adds to the original TOC that has been stored on the RAM, as the ending address of each data stream, the starting address of the next data stream; and

(3) Control means causes the compact disk (CD) to be played according to the edited TOC on said RAM.

In Kondo et al., the edited U-TOC is rewritten to the U-TOC area of the disk(MD) each time it is changed (col.l0, line 66 - col. 11, line 5). In contrast, the compact disk (CD) of claim 1 is an unrecordable compact disk; therefore, the expanded TOC is rewritten to RAM, as the proposed amendments make clear. Such teachings are not provided by Katoh et al.

In the Final Rejection at page 3, lines 2-10, the Examiner alleges that:

> Kondo further discloses the apparatus characterized in that said data processing means comprises: input means for inputting instructions for editing the TOC that has been stored on said storage means (35, fig. 3b); ending address addition means for adding to the original TOC that has been stored on said storage means, as the ending address of each data stream, the starting address of the next data stream (A32-33, figs. 12A-12B and fig.13); editing means for editing the expanded TOC on said storage means in response to the instructions that have been input on said input means (fig.13 and 11,fig.7); and control means for causing the data storage disk to be played according to the edited TOC on said storage means (col.16 lines 30-34) (emphasis added).

However, Kondo et al. do not disclose the ending address addition means for adding to the original TOC that has been stored on said RAM as the starting address of the next data stream. As illustrated in Figure 12B of Kondo et al., the ending address of music M3 is A32,

and the starting address of music M34 is A33. Thus, in the TOC of the disk (MD) of Kondo et al., the ending address of each data stream differs from the starting address of the next data stream. Also, in the TOC of the disk (MD) of Kondo et al., the ending address of music or a sector may become discontinuous with the starting address of the next music or sector. Applicant again submits that Kondo et al. do not disclose the claimed editing means for editing the TOC of the CD as claimed. Katoh et al. is silent on this issue and certainly does not suggest rewriting the expanded TOC to RAM as claimed.

Yamagami et al. and Yasuda et al. also do not disclose "ending address addition means for adding to the original TOC that has been stored on said RAM, as the ending address of each data stream, the starting address of the next data stream" as now claimed. Thus, even if one skilled in the art would have combined the teachings of Yamagami et al. and/or Yasuda et al. with the teachings of Kondo et al. and Katoh et al. as the Examiner proposes, the claimed playback device would not have resulted.

Accordingly, withdrawal of the rejections of claims 1, 3-10 and 12 as being obvious over Kondo et al., Katoh et al., Yamagami et al., and/or Yasuda et al. is appropriate and is solicited. Dependent claims 3-10 and 12 are allowable for at least the reasons given above with respect to claim 1.

Conclusion

For at least the reasons set forth in detail above, entry of the above amendments and allowance of claims 1, 3-10 and 12 are solicited. A Notice of Allowability is respectfully requested.

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